Amendments to the Claims

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for detecting rendered animal byproduct in a sample comprising:

combining ~~a~~ the sample suspected of containing rendered animal byproduct with a detectable ligand having binding affinity for an analyte for a time and under conditions effective to cause at least some analyte, if present, to bind with at least some ligand to form a complex,

separating unbound ligand from the complex,

determining existence or nonexistence of the complex,

correlating the existence or nonexistence of the complex to determine presence or absence of the analyte in the sample;

wherein the analyte is a component of rendered animal byproduct;

wherein the sample is animal feed or a component thereof; and

wherein the amount of rendered animal byproduct detected by the method is about 0.005 % to about 0.5% by weight.

2. (Currently Amended) The method of claim 1, wherein:

a detectable label is attached to the ligand,

combining the sample with the ligand further comprises combining the sample and ligand with a second ligand that is bound to at least one location on a solid phase for a time and under conditions effective to cause at least some analyte, if present, to bind with at

least some ligand and at least some second ligand such that at least some ligand becomes immobilized in the location, and

~~the method further comprises separating unbound ligand from bound ligand after the combining step and before the determining step,~~

determining the existence or nonexistence of the complex comprises determining whether detectable label is present in the location.

3. (Currently Amended) The method of claim 1, wherein:

a detectable label is attached to the ligand,

combining the sample with the ligand further comprises combining the sample and ligand with an analyte analog that is bound to at least one location on a solid phase, wherein the ligand has a binding affinity for the analyte analog, and

~~the method further comprises separating unbound ligand from bound ligand after the combining step and before the determining step,~~

determining the existence or nonexistence of the complex comprises determining the amount of labeled ligand present in the location.

4. (Currently Amended) The method of claim 1, wherein:

combining the sample with the ligand further comprises combining the sample and ligand with an analyte analog having a detectable label attached thereto and the ligand has a binding affinity for the analyte analog,

the ligand is bound to at least one location on a solid phase,

the method further comprises separating unbound analyte analog from bound analyte analog after the combining step and before the determining step,

determining the existence or nonexistence of the complex comprises determining the amount of labeled analyte analog present in the location.

5. (Previously Presented) The method of claim 1, wherein:

determining existence or nonexistence of the complex further comprises determining the amount of the complex, and

correlating the existence or nonexistence of the complex further comprises correlating the amount of complex to determine the amount of analyte present in the sample.

6. (Previously Presented) The method of claims 1, wherein the analyte is a component of meat and bone meal.

7. (Previously Presented) The method of claim 1, wherein the analyte is a component of rendered connective tissue or bone.

8. (Previously Presented)The method of claim 1, wherein the ligand comprises an antibody.

9. Cancelled.

10. (Previously Presented) The method of claim 1, wherein the analyte is a component of the extracellular matrix of bone or cartilage.

11. (Previously Presented) The method of claim 1, wherein the analyte is chondroitin sulfate, aggrecan, osteocalcin, hyaluronic acid, or Type II collagen.

12. (Previously Presented) The method of claim 1, wherein the method detects rendered animal byproduct in the sample in amounts of about 0.1% by weight or more.

13. (Previously Presented) The method of claim 1, wherein the assay further comprises:

combining the sample with at least one additional ligand having binding affinity for a component of rendered animal byproduct of one or more known taxonomic groups, but having measurably lower binding affinity for rendered animal byproduct from one or more different taxonomic groups, for a time and under conditions effective to cause the second ligand to bind with the analyte, if present, to form a complex,

determining existence or nonexistence of the second complex, and

correlating the existence or nonexistence of the second complex to determine presence or absence of rendered animal byproduct of a known taxonomic group or combination of taxonomic groups.

14. (Withdrawn) A method of making an antibody that is immunoreactive with a rendered animal byproduct or a component thereof, comprising administering to an animal a composition comprising an immunogen in such an amount and under such conditions as to cause an immune response in the animal, wherein the immunogen comprises a molecule or substance having one or more structural components with the same immunoreactivity as a component of the rendered animal by product.

15. (Previously Presented) A kit for performing the method of claim 1, comprising materials useful in performing the method and instructions for correlating results of the method to determine the presence or absence of rendered animal byproduct, the amount of rendered animal byproduct, or both.

16. (Withdrawn) An antibody selected from the antibodies designated 244C1 and 244C2.

17. (New) The method of claim 1, wherein the detectable label comprises at least one of radioactive molecules, enzymes, substrates, cofactors, inhibitors, fluorescent moieties, chemiluminescent moieties, or magnetic particles.

18. (New) The kit of claim 15, wherein the amount of rendered animal byproduct is about 0.005 % to about 0.01 % by weight.

19. (New) The kit of claim 15, wherein the amount of rendered animal byproduct is about 0.01 % to about 0.05 % by weight.

20. (New) The kit of claim 15, wherein the amount of rendered animal byproduct is about 0.05 % to about 0.1 % by weight.

21. (New) The kit of claim 15, wherein the amount of rendered animal byproduct is about 0.1 % to about 0.5 % by weight.